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Claims

[c1] 1. A fluid dynamic bearing apparatus comprising:
a rotation shaft;
a sleeve supporting the rotation shaft;
fluid filled between the rotation shaft and the sleeve; and
a dust catcher disposed between the rotation shaft and the sleeve.

[c2] 2. The fluid dynamic bearing apparatus according to claim 1, wherein said dust catcher is fixed to the sleeve.

[c3] 3. The fluid dynamic bearing apparatus according to claim 2, wherein said dust catcher is made of a synthetic resin.

[c4] 4. The fluid dynamic bearing apparatus according to claim 3, wherein through holes are defined in the dust catcher.

[c5] 5. The fluid dynamic bearing apparatus according to claim 4, wherein said dust catcher is an electret filter.

[c6] 6. A fluid dynamic bearing apparatus comprising:
a rotation shaft;
a sleeve supporting the rotation shaft, a groove being

defined on an inner surface of the sleeve;
fluid filled between the rotation shaft and the sleeve; and
a plate member attached to an inlet of the groove,
wherein
through holes are defined in the plate member.

[c7] 7. The fluid dynamic bearing apparatus according to claim 6, wherein said plate member is integral to the sleeve.

[c8] 8. A fluid dynamic bearing apparatus comprising:
a rotation shaft;
a sleeve supporting the rotation shaft;
fluid filled between the rotation shaft and the sleeve; and
a corrosive added into the fluid.

[c9] 9. A fluid dynamic bearing apparatus comprising:
a rotation shaft;
a sleeve supporting the rotation shaft, an inner surface of the sleeve being opposed to an outer surface of the rotation shaft;
fluid filled between the rotation shaft and the sleeve;
grooves defined on the inner surface of the sleeve so as to generate dynamic pressure in the fluid; and
depressions defined on the inner surface of the sleeve.

[c10] 10. The fluid dynamic bearing apparatus according to

claim 9, wherein said depressions are located within the grooves.

[c11] 11. A fluid dynamic bearing apparatus comprising:
a rotation shaft;
a sleeve supporting the rotation shaft; and
a prevention member designed to prevent inclination of the rotation shaft standing still.

[c12] 12. The fluid dynamic bearing apparatus according to claim 11, wherein said prevention member is a protrusion formed on the sleeve so as to extend toward the rotation shaft.

[c13] 13. The fluid dynamic bearing apparatus according to claim 12, wherein a gap is defined between the prevention member and the rotation shaft when the rotation shaft rotates.

[c14] 14. The fluid dynamic bearing apparatus according to claim 11, wherein said prevention member is a protrusion formed on the rotation shaft so as to extend toward the sleeve.

[c15] 15. The fluid dynamic bearing apparatus according to claim 14, wherein a gap is defined between the prevention member and the sleeve when the rotation shaft rotates.